



Homestake Mining Company of California

Thomas Wohlford
Closure Manager

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Document Control Desk
U.S. Nuclear Regulatory Commission,
Washington, DC 20555-0001

Mr. Jeffrey Whited, Project Manager
Project Manager, Materials Decommissioning Branch (Mail Stop: T-8F5)
Decommissioning, Uranium Recovery & Waste Programs
Office of Nuclear Materials Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Ms. Ashlynn Winton
Ground Water Quality Bureau
New Mexico Environment Department
PO Box 5469
Santa Fe, NM 87502-5469

**RE: Homestake Mining Company, Grants Reclamation Project, Discharge Permit DP-200:
Updated Notification of Evaporation Pond Leak Detection Systems**

Dear Mr. Whited:

Homestake Mining Company of California (HMC) is providing this updated notification letter regarding elevated leak detection system (LDS) rates identified at Evaporation Ponds No. 2 and 3 at the Grants Reclamation Project located in Grants, New Mexico. Evaporation Pond No. 2 (EP-2) installed in 1994 and Evaporation Pond No. 3 (EP-3) installed in 2010, are both dual HDPE-lined ponds equipped with leak detections. In 2017, during internal review of operating requirements and procedures, HMC identified that the leak detection pumping rates of EP-2 and EP-3 on occasions exceed a leak detection performance criterion of 775 gallons per day per acre foot of storage (gpd/acre). HMC notified the regulatory agencies of this exceedance of the leak detection pumping rates in a technical memorandum dated November 15, 2017 (ML18094A120). The 775 gpd/acre is identified in a July 18, 2007 reference to SUA-1471 License Condition 35D.

The initial assessment activities in late 2017 and early 2018 identified that the leak detection pumps were operated manually and that no water level readings were collected from the sumps. A number of leak detection pumps had also failed over time. HMC pulled all the pumps and attempted to replace those that had failed. In leak detection cells 1 and 5 of EP-2, new pumps were not able to be reinstalled all the way to the sump bottom due to partial collapse of the HDPE piping restricting the hole diameter. The same condition exists for leak detection 1, 3 and 4 in EP-3's Basin A. This squeezing of the piping was caused by the weight of the water and the poor strength of the HDPE itself that was not installed as per original pond design specifications. The operating procedures have been updated to include manual water level readings but HMC is still working on a solution to reinstalling pumps back into the bottom of the sumps pipes that have been squeezed to a smaller diameter.

The attached graphs show the leak detection rates measured for EP-2, EP-3 Basin A and EP-3 Basin B. Elevated pumping rates above 775 gpd/acre have been identified for leak detections 2 and 3 of EP-2 in Dec. 2017, Jan. 2018, March-April-May 2018 and August 2018. Elevated pumping rates above 775 gpd/acre have been measured for leak detections 2 and 5 of EP-3's Basin A in August 2018. For EP-3's Basin B, high pumping rates have been identified for leak detections 3, 4 and 5 from October 2017 through March 2018.

Pursuant to Discharge Permit (DP) 200 Condition 33 of New Mexico Environment Department (NMED), HMC is currently performing quarterly monitoring of wells DD and DD-2 as monitoring points for EP-3. In June 2017, additional monitoring wells DD-3, DD-4, DD-5, DD-6 and DD-7 were installed around the perimeter of EP-3. HMC has performed quarterly monitoring of these wells, the data of which is summarized in HMC's 2017 Annual Report for the Grants Reclamation Project.

As a follow-up to verbal communications on September 11, 2018 during the NMED's site visit, HMC has made the decision to increase monitoring of the EP-3 monitoring wells to weekly water level measurements and monthly water quality sampling using the site H list (Water Level, Sulfate, Uranium, Selenium, TDS, Molybdenum and Chloride). This additional monitoring will be performed until further notice due to elevated pump back rates identified in the EP-3 leak detections and to confirm that there is not a release to the environment. No additional monitoring is proposed for EP-2 as the pond is within the groundwater control area on site with collection and injection wells located downgradient from the pond to prevent any migration of site constituents of concern.

If you have any questions or comments regarding this matter, please contact me via e-mail at twohlford@homestakeminingcoca.com or at the Grants office at 505.290.2187.

Respectfully,



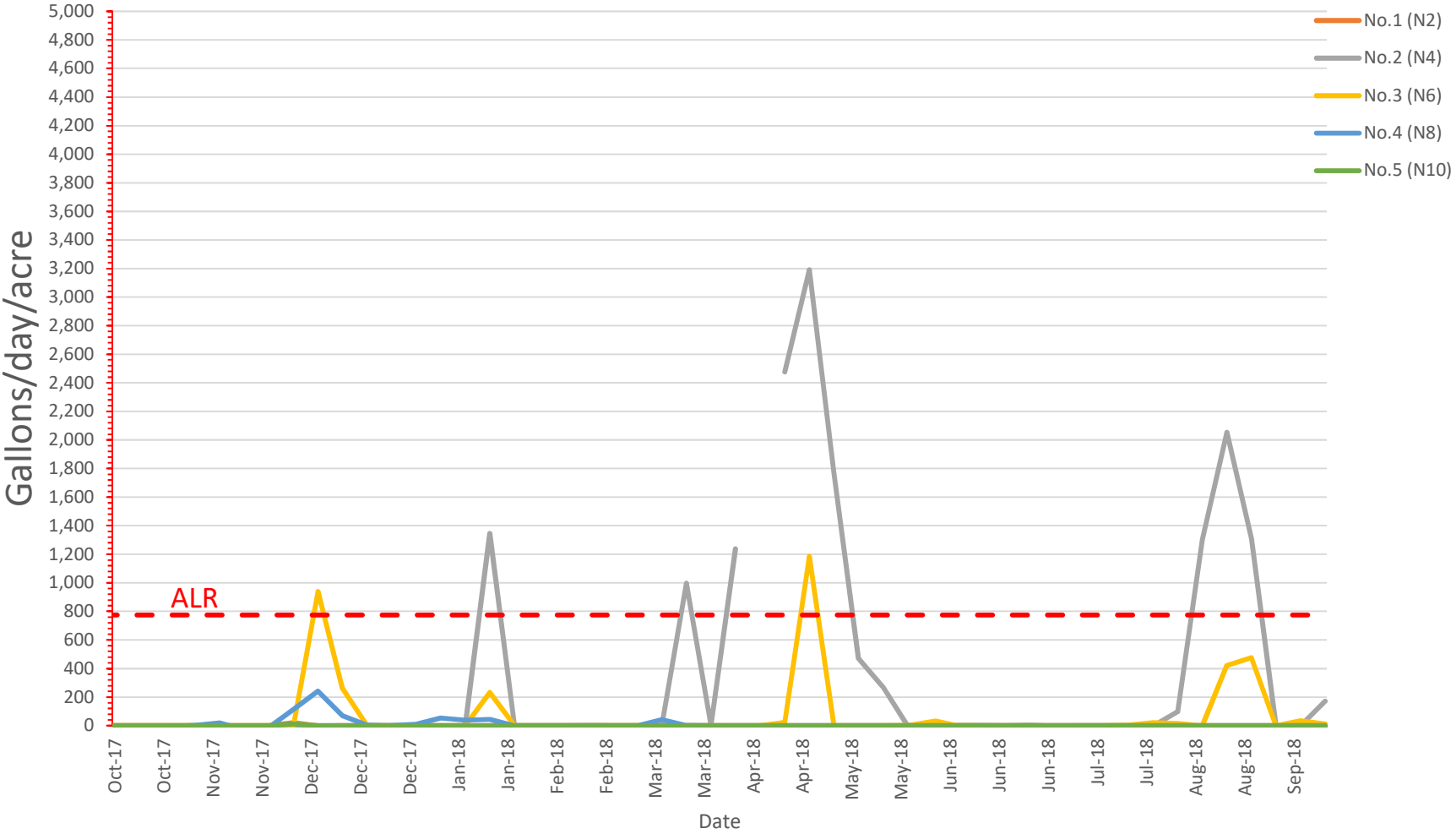
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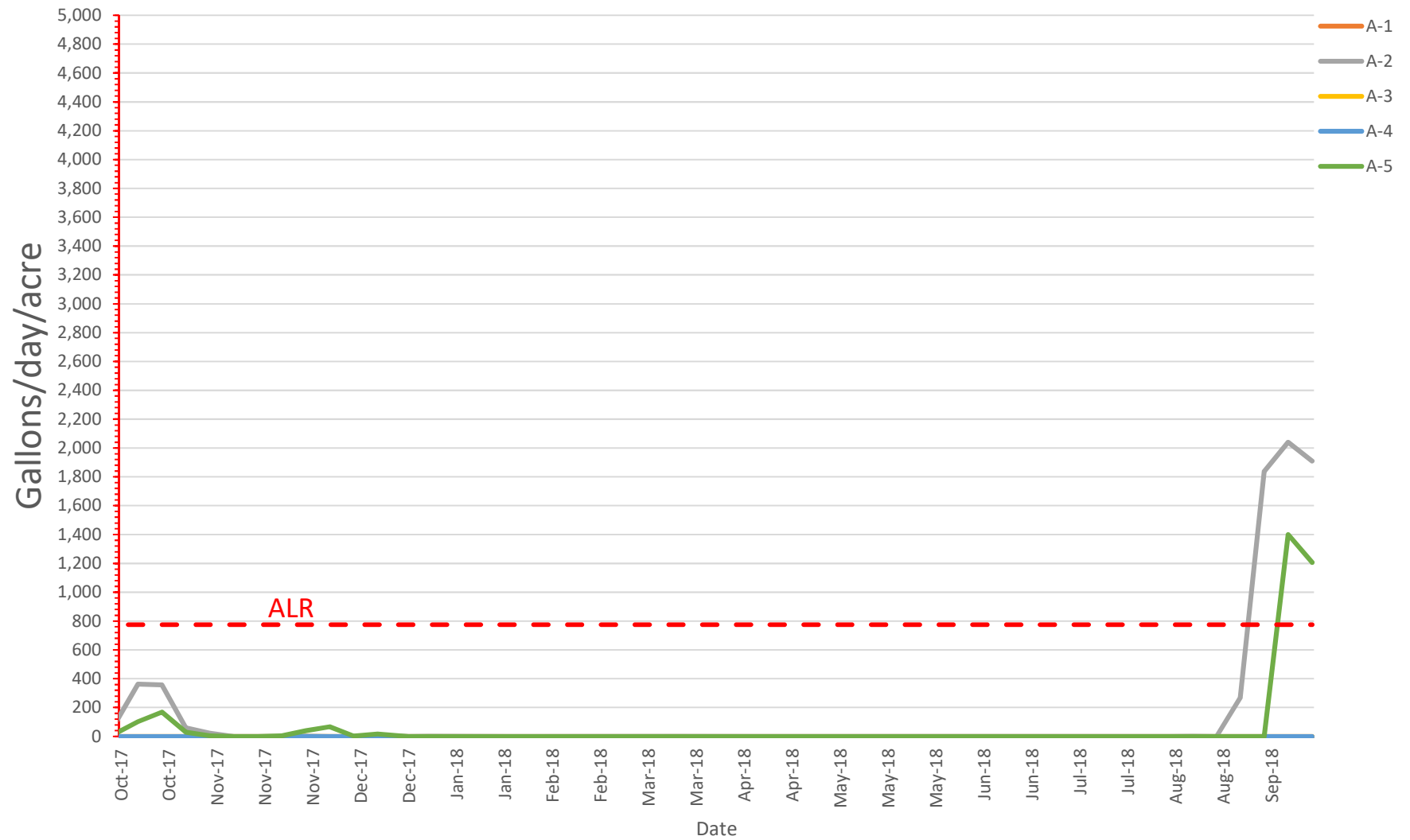
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EVAP POND 2



EVAP POND 3A



EVAP POND 3B

